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PRE-APPEAL BRIEF REQUEST FOR REVIEW		Docket Number (Optional)		
		9314-45		
I hereby certify that this correspondence is being transmitted	Application Number		Filed	
electronically to the U.S. Patent and Trademark Office	10/626,224		07/24/2003	
on 06/19/2008	First Named Inventor			
Signature Susan E. Freedman	William O. Camp, Jr.			
orginatoro	Art Unit Examiner			
Typed or printed Susan E. Freedman	2618		Eugene Yun	
Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.				
This request is being filed with a notice of appeal.				
The review is requested for the reason(s) stated on the attached sheet(s).  Note: No more than five (5) pages may be provided.				
I am the				
applicant/inventor.		Jame 1	Signature	
assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.		David K. Purks		
(Form PTO/SB/96)	Typed or printed name			
X attorney or agent of record. 40,133	919-854-1400			
		Telephone number		
attorney or agent acting under 37 CFR 1.34.	06/19/2008			
Registration number if acting under 37 CFR 1.34	Date			
NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required.  Submit multiple forms if more than one signature is required, see below*.				
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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: William O. Camp, Jr.

Application No.: 10/626,224

Confirmation No. 4546 Examiner: Eugene Yun Group Art Unit: 2618

Filed: July 24, 2003 For: WIRELESS

WIRELESS TERMINALS AND METHODS FOR COMMUNICATING OVER CELLULAR AND ENHANCED MODE BLUETOOTH COMMUNICATION LINKS

Mail Stop AF Commissioner for Patents Box 1450 Alexandria, VA 22313-1450 June 19, 2008

## REASONS IN SUPPORT OF APPLICANT'S PRE-APPEAL BRIEF REQUEST FOR REVIEW

This document is submitted in support of the Pre-Appeal Brief Request for Review that is filed concurrently herewith along with a Notice of Appeal. Applicant requests a Pre-Appeal Brief Review of the claims finally rejected in the Final Office Action mailed March 26, 2008.

In the interest of brevity and without waiving the right to argue the numerous independent bases for patentability of the dependent claims should this Petition be denied, Applicant will only discuss the patentability of independent Claims 1, 3, 9, 10, 15, 21, and 22. The reasons for these additional bases for patentability of the dependent claims are described in Applicant's Amendment dated December 21, 2007 and are incorporated herein by reference.

<u>Claim 1</u> recites (paragraph 1 and 2 numbering and emphasis added):

1. A wireless terminal, comprising:

a short-range communication module that is configured to communicate first information over a short-range wireless interface with a communication device;

a cellular transceiver that is configured to communicate second information with a cellular network according to a cellular communication protocol; and a processor that is configured to

- (1) encode voice in the second information using at least one of an Enhanced Full Rate (EFR) codec and an Adaptive Multi-Rate (AMR) codec for transmission by the cellular transceiver according to a signal processing operation, and
- (2) is configured to <u>selectively encode voice</u> in the first information using at least one of the EFR codec and the AMR codec for communication by the <u>short-range communication module</u> using the signal processing operation <u>based</u> on whether the communication device supports an enhanced communication <u>mode</u>.
- 1. Clear Error in Final Office Action's Construction of Claim 1 term "short-range communication module":

In an attempt to read Claim 1 onto El-Maleh, the Final Office Action construes El-Maleh's description of cellular systems (CDMA, UMTS, or GSM) using EFR/AMR voice

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encoding as reading on the term "short-range communication module" of Claim 1. The Final Office Action's only basis for such construction of this claim term is that the "the claim does not state how short the range is." (Final Office Action, page 11).

However, the separate recitations of two structural elements of the wireless terminal of Claim 1 define that the "short-range communication module" is different than the "cellular transceiver." Claim 1 further recites that the processor carries out a different function for the "cellular transceiver" compared to the "short-range communication module." In particular, Claim 1 recites that processor: 1) encodes voice in the second information using at least one of an Enhanced Full Rate (EFR) codec and an Adaptive Multi-Rate (AMR) codec *for transmission by the cellular transceiver* according to a signal processing operation, and 2) selectively encodes voice in the first information using at least one of the EFR codec and the AMR codec *for communication by the short-range communication module* using the signal processing operation based on whether the communication device supports an enhanced communication mode.

Consequently, the Examiner's construction of the claim term "short-range communication module" to have the same meaning as the claim term "cellular transceiver," so as to attempt to read El-Maleh's cellular systems thereon, is clearly contrary to many express recitations of Claim 1. Therefore, Applicant submits that it is clear error for the Final Office Action to construe Maleh's description of only cellular systems as reading on the functionality recited in Claim 1 for the term "short-range communication module."

Applicant submits that in neither the sections cited by the Final Office Action nor elsewhere does El-Maleh or Rasmusson, or the combination thereof, describe or suggest that a EFR codec or an AMR codec is used to encode voice for communication by a "short-range communication module."

## 2. Clear Error in Final Office Action's Understanding of El-Maleh's Teachings:

Claim 1 recites, *inter alia*, that the processor is configured to <u>selectively encode voice</u> in the first information using at least one of the EFR codec and the AMR codec for communication by the short-range communication module using the signal processing operation <u>based on</u> whether the communication device supports an enhanced communication mode.

The Final Office Action erroneously contends that these recitations of Claim 1 read on El-Maleh's col. 8, line 62 to col. 9, line 21 and, in particular, col. 9, lines 10-15 (in bold and underlined below):

... Some examples of modulation schemes used within communication systems are the Quadrature Phase Shift Keying scheme (QPSK), 8-ary Phase Shift Keying scheme (8-

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PSK), and 16-ary Quadrature Amplitude Modulation (16-QAM). <u>Some of the various encoding schemes that can be selectively implemented are convolutional encoding schemes, which are implemented at various rates, or turbo coding, which comprises multiple encoding steps separated by interleaving steps.</u> ... (El-Maleh, portion of col. 8, line 62 to col. 9, line 21, emphasis added).

When read in the proper context, it is clear that El-Maleh's use of the term "selectively implemented" refers to that the cellular system may be implemented using one or more "convolutional encoding schemes, which are implemented at various rates, or turbo coding, which comprises multiple encoding steps separated by interleaving steps." This understanding is consistent with El-Maleh prior sentence which similarly says that the modulation schemes that can be used within its cellular systems "are the Quadrature Phase Shift Keying scheme (QPSK), 8-ary Phase Shift Keying scheme (8-PSK), and 16-ary Quadrature Amplitude Modulation (16-QAM)."

Consequently, in neither the cited section nor elsewhere does El-Maleh teach or suggest that a processor <u>selectively encodes voice</u> in the first information using at least one of the EFR codec and the AMR codec for communication by the short-range communication module using the signal processing operation (which is also used to encode voice in second information for transmission by a cellular transceiver) <u>based on whether the communication device supports an</u> enhanced communication mode.

The Final Office Action therefore has not established a *prima facie* case of obviousness because Rasmusson and El-Maleh does not teach or suggest <u>all</u> the recitations of Claim 1.

M.P.E.P. §2143. Consequently, Claim 1 is patentable over Rasmusson in view of El-Maleh.

Independent Claim 3 recites, inter alia, "a processor that is configured to encode voice in the second information using at least one of an Enhanced Full Rate (EFR) codec and an Adaptive Multi-Rate (AMR) codec for transmission by the cellular transceiver, and to <u>selectively</u> <u>encode voice</u> in the first information using at least one of the EFR codec and the AMR codec for communication by the Bluetooth module <u>based on whether the remote Bluetooth device</u> <u>supports an enhanced communication mode</u>", which the Office Action concedes is not taught by Rasmusson. El-Maleh does not describe or suggest that a EFR codec or an AMR codec is used to encode voice for communication by a "Bluetooth module" and, moreover, as explained above for Claim 1, does not describe or suggest that a mobile communication terminal <u>selectively</u> <u>encodes voice</u> in first information using at least one of the EFR codec and the AMR codec for communication by the Bluetooth module <u>based on whether the remote Bluetooth device</u>

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<u>supports an enhanced communication mode</u>. Claim 3 is therefore patentable over Rasmusson in view of El-Maleh.

Independent Claim 9 recites, *inter alia*, "a processor that is configured to convolutionally encode the second information for transmission by the cellular transceiver according to a signal processing operation, and to *selectively convolutionally* encode the first information according to the signal processing operation *for communication by the Bluetooth module based on whether the remote Bluetooth device supports an enhanced communication mode*", which the Office Action concedes is not taught by Rasmusson. The Office Action contends that this recitation of Claim 9 is taught by El-Maleh's col. 9, lines 6-21, a portion of which is repeated below (emphasis added):

Some examples of modulation schemes used within communication systems are the Quadrature Phase Shift Keying scheme (QPSK), 8-ary Phase Shift Keying scheme (8-PSK), and 16-ary Quadrature Amplitude Modulation (16-QAM). Some of the various encoding schemes that can be <u>selectively implemented</u> are <u>convolutional encoding</u> <u>schemes</u>, which are implemented at various rates, or turbo coding, which comprises multiple encoding steps separated by interleaving steps. ...

Although El-Maleh describes that a cellular system may use a "convolutional encoding scheme," in neither the cited section nor elsewhere does El-Maleh describe or suggest that convolutional coding is used to encode voice for communication by a "Bluetooth module" and, moreover, as explained above, it does not describe or suggest that a mobile communication terminal <u>selectively convolutionally</u> encodes the first information according to the signal processing operation <u>for communication by the Bluetooth module based on whether the remote Bluetooth device supports an enhanced communication mode</u>. Claim 9 is therefore patentable over Rasmusson in view of El-Maleh.

Independent Claim 10 recites, *inter alia*, "a processor that is configured to interleave the second information over time for transmission by the cellular transceiver according to a signal processing operation, and to *selectively interleave* the first information over time according to the signal processing operation *for communication by the Bluetooth module based on whether the remote Bluetooth device supports an enhanced communication mode*", which the Office Action concedes is not taught by Rasmusson. Although the cited El-Maleh's col. 7, lines 53-67 describes that in a cellular system "bits are ... interleaved", in neither the cited section nor elsewhere does El-Maleh describe or suggest that information is interleaved over time for communication by a "Bluetooth module" and, moreover, does not describe or suggest that a

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mobile communication terminal <u>selectively convolutionally</u> encodes as recited in Claim 10. Claim 10 is therefore patentable over Rasmusson in view of El-Maleh.

Independent Claim 15 recites a method of operating the wireless terminal that includes "determining whether a remote Bluetooth device supports an enhanced communication mode." The Office Action contends that this recitation is taught by Rasmusson's page 14, line 30 to page 15, line 10. However, the cited section of Rasmusson contains no description nor suggestion that a determination is made as to whether a remote Bluetooth device supports an enhanced communication mode. The method Claim 15 further includes "selectively encoding voice in first information using at least one of an Enhanced Full Rate (EFR) codec and an Adaptive Multi-Rate (AMR) codec according to a signal processing operation for communication to the remote Bluetooth device based on whether the remote Bluetooth device supports an enhanced communication mode". Accordingly, Claim 15 is patentable over Rasmusson and El-Maleh for at least the reasons explained for Claim 1 as to why El-Maleh does not disclose selective encoding responsive to the recited condition.

<u>Independent Claim 21</u> is a method that corresponds to the wireless terminal of Claim 9, and is submitted to be patentable for at least the reasons explained above for Claim 9.

<u>Independent Claim 22</u> is a method that corresponds to the wireless terminal of Claim 10. and is submitted to be patentable for at least the reasons explained above for Claim 10.

Respectfully submitted,

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CERTIFICATION OF TRANSMISSION

I hereby certify that this correspondence is being transmitted via the Office electronic filing system in accordance with  $\S 1.6(a)(4)$  to the U.S. Patent and Trademark Office on June 19, 2008.

Susan E. Freedman

Date of Signature: June 19, 2008